#### REMARKS

#### "Objections/Rejections Maintained" and "Response to Arguments"

#### **Deposit**

Regarding the biological deposit(s) of the application, (1) Access to the deposit(s) will be available during pendency of the patent application making reference to the deposit to one determined by the Commissioner to be entitled thereto under § 1.14 and 35 U.S.C. 122, and (2) subject to 37 CFR 1.808(b), all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of the patent.

#### Paragraph 10 - objection to claim 12 under 37 CFR 1.75(c)

Claim 12 was rejected as being in improper dependent form. Applicants canceled claim 12, thereby obviating this rejection, by deleting the phrase, 'crude antigen mixture or purified antigen or antigens from the microorganism.' Applicants believe claim 12 is now in proper dependent form and respectfully request withdrawal of this objection.

### Paragraph 11 -- rejection of claims 2-3, 10, 11, 12, 23, is 52 under 35 USC 112, first paragraph

These claims were rejected for lack of enablement. Applicants respectfully submit that this rejection is obviated by the statement regarding access to the biological deposit(s) made above. Accordingly, withdrawal of this rejection is respectfully requested.

### Paragraphs 12 and 14 -- rejection of claims 9-12, 15-17, 19-20 under 35 USC 112, first paragraph

These claims were rejected for lack of enablement for fragments of the recited microorganisms functioning as a vaccine or a component of pharmaceutical composition administered to an animal. The applicants respectfully submit that with respect to claim 9 and those that depend from it (claims 10-12, 15-17, and 19-20), this rejection is inapposite. Neither claim 9 nor those that depend from it recite a fragment of a microorganism. In paragraph 14, the Office Action alleged that the scope of claim 9 included the species recited in claim 12. The applicants respectably traversed this allegation. Claims of 9 and 12 are not related as genus and species, respectfully. Rather, claim 12 adds

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additional limitations not present in claim 9. To the extent of that any previous statement by the applicants is to the contrary, it is believed to have been in error and is hereby withdrawn.

With regard claim 12, this claim has bee canceled, thereby obviating this rejection.

Paragraph 13 -- rejection of claims and 19-23 under 35 USC 112, second paragraph The rejection of claims 19-23 as indefinite in the recitation of "prophylaxis of lactic acidosis and vertebrate" was maintained for the reasons of record. The applicant respectfully traverses this rejection.

Claims 22 and 23 have been canceled, rendering this rejection moot as to these claims.

Claims 19 and 21 have been amended to recite that administration is via intramuscular, subcutaneous, or inhalation routes. As such, the microorganisms recited in the claims can never reach the gut and, therefore, cannot colonize there. Accordingly, the concern raised in this rejection is obviated.

In view of the foregoing, the applicant respectfully requests reconsideration and withdrawal.

## Paragraph 15 -- Rejection of claims 1-3, 9-11, 23, and 52 under 35 USC 112, second paragraph

These claims were rejected as being indefinite for setting apart claim limitations in brackets. The claims have been amended to obviate this rejection. Reconsideration and withdrawal is respectfully requested.

# Paragraphs 16, 17, and 30-33 -- rejection of claims 1, 2, 8-10, 12, 15-22 under 35 USC 102(b)

The rejection of these claims as anticipated by Leer et al. and/or WO 99/00136 for reasons of record or maintained.

Claims 1 and 2 have been canceled and claimed 3 written in independent form. Claim is dependent from claim 1 have been amended to depend from claim 3. These amendments obviate these rejections. Reconsideration and withdrawal of these rejections is therefore respectfully requested.

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#### Paragraph 18 and 19 -- objection to claim 12 under 37 CFR 1.75(c)

This claim was objected to for allegedly broadening the scope of claim 9 from which it depended. Claim 9 has been amended to incorporate several of the limitations of claim 12, and claim 12 has been canceled. With these amendments, this objection is obviated.

### Paragraphs 20 and 21 -- rejection of claims 2-3, 10, 11, 22, 23, and 52 under 35 USC 112, first paragraph

These claims were ejected for falling to satisfy the deposit requirement. With the deposit statement provided above, applicant respectfully submits that this rejection is overcome. Reconsideration and withdrawal of this rejection is respectfully requested.

### Paragraphs 22 and 23 -- rejection of claims 9-12, 15-17, and 19-20 under 35 USC 112, first paragraph

These claims were rejected for lacking written description in the recitation of "fragment or fragments." Claim 9 has been amended in claim 12 has been canceled, thereby obviate in this projection. Reconsideration and withdrawal is respectfully requested.

### Paragraphs 24 and 25 -- rejection of claims 19-23 under 35 USC 112, second paragraph

These claims were rejected as indefinite for the recitation of the phrase "prophylaxis of lactic acidosis in a vertebrate." The applicant respectfully submits that the arguments presented above in response to the rejection in paragraph 13 also address this rejection. Accordingly, reconsideration in view of these arguments and withdrawal of this rejection is respectfully requested.

### Paragraphs 26 and 27 -- rejection of claims 19-23 under 35 USC 112, second paragraph

These claims were rejected as being indefinite for the recitation of "fragment or fragments." Claim 12 has been canceled and some of its limitations incorporated into claim 9. With these amendments, the applicant respectfully submits that this rejection is obviated. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

### Paragraphs 28 and 29 -- rejection of claims 1-3, 9-11, 23, and 52 under 35 USC 112, second paragraph

These claims were rejected because of the presence of parentheses. The claims have been amended to remove the parentheses, thereby obviating this rejection. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

#### "New Grounds of the Objection/Rejection"

### Paragraphs 3 and 4 -- rejection of claims 1-3, 5, 8-12, 15-23, and 52

These claims were rejected due to the recitation of brackets/parentheses. The brackets/parentheses have been removed by amendment, thereby obviating this rejection.

### Paragraphs 5 and 34 -- rejection of claim 12 under 37 CFR 1.75(c) and 35 USC 112, second paragraph

Claim 12 was rejected for being in improper dependent form and as being indefinite. Claim 12 has been canceled and some of its limitations incorporated into claim 9. By these amendments, these rejections are obviated.

#### Paragraphs 6 - 8 -- rejection of claims as anticipated

Various of the claims were ejected as anticipated by US 4,382,097, US 5,939, 303, and US 4,579,733 or 4,710,379 or 4,746,512. The amendments presented herein obviate these rejections as the claims now recite specific bacteria not disclosed (or suggested) in any of the cited references.

The foregoing amendments and remarks are believed to place that claims a condition for allowance; which is respectfully solicited. If there are any questions or comments regarding this Response or application, the Examiner is encouraged to contact the undersigned attorney as indicated below.

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